

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (Previously Presented) A taught position modification device for correcting positions of taught points in an operation program of a robot prepared by an offline programming system, using a visual sensor arranged at a movable part of the robot, said device comprising:

determining means for determining a position or an orientation of an object of operation based on positions of at least two characteristic points on an image of the object captured by the visual sensor;

correction means for correcting the positions of the taught points in the operation program based on the determined position or orientation of the object;

moving means for moving an operation tool or a position correction tool attached to a distal end of an arm of the robot at the corrected positions of the taught points;

setting means for setting a jog-feed coordinate system with respect to the corrected positions of the taught points using information from the offline programming system; and

modification means for modifying the corrected positions of the taught points in the operation program based on positions of a control point of the operation tool or the position correction tool, at which positions or orientations of the operation tool or the position correction tool are designated by jog feeds using the jog-feed coordinate system such that the control point takes objective positions for the taught points.

2. (Original) A taught position modification device according to claim 1, further comprising display means for displaying an image of a model of the object based on information from the offline programming system, and for indicating coordinate axes of the jog-feed coordinate system in accordance with lines defined by the corrected positions of the taught points in the image of the model.

3. (Previously Presented) A taught position modification device according to claim 1, where said modification means modifies the positions of subsequent taught points in accordance with modification of one of the taught points each time when the position of the one of the taught

points is modified.

4. (Original) A taught position modification device according to claim 3, wherein said moving means moves the operation tool or the position correction tool to the position of the subsequent taught point which is modified in accordance with the modification of the one taught point, on demand of an operator.